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# **COLLECTIONS SUMMARY FOR FORT KAMEHAMEHA, HAWAII**

**U.S. Army NAGPRA Compliance Project,  
Technical Report No. 87**



**Prepared for the  
U.S. Army Environmental Center,  
Environmental Compliance Division**

**by the  
U.S. Army Corps of Engineers,  
St. Louis District,  
*Mandatory Center of Expertise for the Curation and Management  
of Archaeological Collections***

**19990603 021**

| REPORT DOCUMENTATION PAGE  |   |  | Form Approved<br>OMB No. 0704-0188   |                                  |
|--|---|--|--|----------------------------------|
| Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.   |   |  |  |                                  |
| 1. AGENCY USE ONLY (Leave blank)   |   | 2. REPORT DATE<br>March 1996                               |  | 3. REPORT TYPE AND DATES COVERED |
| 4. TITLE AND SUBTITLE<br>Archaeological Collection Summary for<br>Fort Kamehameha, Hawaii  |   |  | 5. FUNDING NUMBERS<br><br>MIPR #8504   |                                  |
| 6. AUTHOR(S)<br>U.S. Army Corps of Engineers, St. Louis District<br>Mandatory Center of Expertise for the Curation<br>and Management of Archaeological Collections (MCX)   |   |  |  |                                  |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)<br>U.S. Army Corps of Engineers, St. Louis District,<br>Mandatory Center of Expertise for the Curation and<br>Management of Archaeological Collections (CELMS-PD-C)<br>1222 Spruce Street, St. Louis, MO 63103-2833   |   |  | 8. PERFORMING ORGANIZATION<br>REPORT NUMBER<br>U.S. Army NAGPRA<br>Compliance Project<br>Technical Report 87 |                                  |
| 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)<br>U.S. Army Environmental Center<br>Environmental Compliance Division (SFIM-AEC-ENC)<br>Aberdeen Proving Ground, MD 21020-5401  |   |  | 10. SPONSORING/MONITORING<br>AGENCY REPORT NUMBER<br>SFIM-AEC-EC-CR-96087                                    |                                  |
| 11. SUPPLEMENTARY NOTES<br>This research was supported in part by an appointment to the Research Participation Program at the St. Louis District, U.S. Army Corps of Engineers administered by the Oak Ridge Institute for Science and Education through an interagency agreement between the U.S. Department of Energy and the St. Louis District, U.S. Army Corps of Engineers.  |   |  |  |                                  |
| 12a. DISTRIBUTION/AVAILABILITY STATEMENT<br>Approved for public release-<br>distribution unlimited   |   |  | 12b. DISTRIBUTION CODE   |                                  |
| 13. ABSTRACT (Maximum 200 words)<br>The U.S. Army Environmental Center tasked the Mandatory Center of Expertise for the Curation and Management of Archaeological Collections (MCX) with the job of assisting the Army with complying with the Native American Graves Protection and Repatriation Act (NAGPRA), P.L.101-601. The MCX was asked to locate and assess archaeological collections derived from Army lands, to identify the Native American or Native Hawaiian organizations culturally affiliated with the collections, and to draft Section 6 Summary letters for each installation. A two-stage process was used to identify, locate, and assess the contents of the collections, consisting of archival research and telephone interviews with the repository personnel. This report conveys the results of the collection research completed for compliance with Section 6 of NAGPRA. |   |  |  |                                  |
| 14. SUBJECT TERMS<br>archaeology; curation; cultural resources management;<br>Native Americans; sacred objects; human remains.   |   |  | 15. NUMBER OF PAGES<br>29  |                                  |
|  |   |  | 16. PRICE CODE   |                                  |
| 17. SECURITY CLASSIFICATION<br>OF REPORT<br>unclassified   | 18. SECURITY CLASSIFICATION<br>OF THIS PAGE<br>unclassified | 19. SECURITY CLASSIFICATION<br>OF ABSTRACT<br>unclassified | 20. LIMITATION OF ABSTRACT<br>UL   |                                  |

**AN ARCHAEOLOGICAL COLLECTIONS SUMMARY  
FOR  
FORT KAMEHAMEHA, HAWAII**

**Information Provided for Compliance with the  
Native American Graves Protection and Repatriation Act  
Section 6 Summary**

**Prepared for the  
U.S. Army Environmental Center,  
Environmental Compliance Division  
Aberdeen Proving Ground, Maryland**

**By  
U.S. Army Corps of Engineers,  
St. Louis District,  
Mandatory Center of Expertise for the  
Curation and Management of Archaeological Collections,  
U.S. Army NAGPRA Compliance Project,  
Technical Report No. 87**

**March 1996**

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## OBJECTIVES AND METHODS

The U.S. Army Environmental Center (AEC) tasked the Mandatory Center of Expertise for the Curation and Management of Archaeological Collections (MCX) with the job of assisting Army installation personnel in complying with the requirements of the Native American Graves Protection and Repatriation Act (P.L. 101-601, NAGPRA). The MCX was asked to locate and assess archaeological collections derived from Army-owned lands, to identify the Native Hawaiian organizations most likely culturally affiliated with the collections, to draft Section 6 Summary letters for each installation, and to conduct physical inventories of any collections that contain human skeletal remains. This report conveys the results of the collections research completed to assist Fort Kamehameha in complying with the Section 6 Summary requirements of NAGPRA.

The MCX used a two-stage process to identify, locate, and assess the contents of archaeological collections from the installation. First, archival research was performed to review all archaeological site records and reports for the installation. Second, telephone interviews were conducted with personnel at installations, universities, museums, and archaeological contractors that were identified during the archival research as possible repositories of army collections. The MCX did not physically verify the existence of collections and, as such, the information contained in this report is based on background record reviews and information obtained via telephone interviews with the aforementioned installation personnel and institution professionals.

Archival research for Fort Kamehameha began with a search of the National Archeological Data Base (NADB) for references pertaining to the installation. This was followed by a thorough examination of all archaeological site forms and a literature review of all pertinent archaeological reports and manuscripts on file at the Department of Land and Natural Resources, State Historic Preservation Division, Honolulu; the Bernice Pauahi Bishop Museum, Honolulu; and the U.S. Army Corps of Engineers, Pacific Ocean Division, Fort Shafter, Hawaii. The records search was performed at the above repositories in September of 1995 and sought to identify any work on the installation that may have produced archaeological collections.

Subsequent telephone interviews to potential collections repositories ascertained whether the materials were present and the range of objects in each collection. Draft Section 6 Summary letters are enclosed (Appendix I), as well as a listing of the Native Hawaiian organizations that should be contacted and their points of contact (Appendix II).

## RESEARCH RESULTS

### ARCHAEOLOGICAL INVESTIGATIONS AT FORT KAMEHAMEHA

Archaeological investigations at Fort Kamehameha began in 1933 when J. Gilbert McAllister conducted an archeological survey of the island of Oahu for the Bernice P. Bishop Museum, and have continued to the present. Since 1933, four groups have performed additional archaeological investigations:

Bernice P. Bishop Museum (BPBM), Department of Anthropology, Honolulu,  
Cultural Surveys Hawaii, Kailua,  
International Archaeological Research Institute, Inc., Honolulu, and  
U.S. Army Corps of Engineers, Pacific Ocean Division, Fort Shafter.

Only work conducted by Cultural Surveys Hawaii and the U.S. Army Corps of Engineers produced collections.

Effective 1 October 1992, Fort Kamehameha became part of Hickam AFB, as Wheeler AFB became Wheeler Army Air Field. Although archaeological work has continued to the present, only work conducted at Fort Kamehameha while it was Army property will be addressed in this report. Additionally, beginning in 1991, work conducted by Ogden Environmental and Energy Services at Fort Kamehameha for a water treatment plant was under contract with the Department of the Navy, and the Navy has assumed responsibility for NAGPRA compliance for these collections (telephone conversation with Annie Griffin, Pacific Division Naval Facilities Engineering Command, 9 February 1996).

### SUMMARY OF ARCHAEOLOGICAL COLLECTIONS

A total of approximately 1 ft<sup>3</sup> (193 artifacts) and associated documentation have been identified for Fort Kamehameha. Artifacts collected include prehistoric basalt beads, limestone flakes, and fishhook fragments, historic glass, metal ceramic, shell, and animal bone, as well as soil samples, charcoal samples, and shell midden samples.

As of date of this report, all the artifacts from Fort Kamehameha are reportedly housed at Cultural Surveys Hawaii. Human remains excavated from Fort Kamehameha are reported to be at the Bernice P. Bishop Museum.

The attached *Summary of Current Locations of Archaeological Collections from Fort Kamehameha* (Appendix III) provides more detailed information about each collection derived as a result of archaeological investigations at the installation. A collection consists of all of the materials, artifacts and associated documentation (e.g., field notes, maps, photos, data analyses, correspondence), produced as a result of an archaeological investigation or project at a single site or multiple sites. In some cases, the same archaeological site may have been investigated by various individuals or organizations. Depending on where the resulting collections are curated, they may be stored and identified as separate collections or separate components of a single collection. In cases where the artifacts and records have become separated, we list the records collections repository as well.

Every attempt has been made to locate all collections cited on available archaeological site records or in published and unpublished references to archaeological investigations on the installation.

### **NAGPRA-Related Materials**

The most common and widespread method of interment in ancient Hawaii was burial in sand dunes or earth. Nearly all large dune deposits around the islands are known to contain large numbers of prehistoric burials. The burials themselves take a variety of forms, such as secondary bundle burials consisting of only a cranium and long bones, to primary flexed burials, and fully extended burials (Kirch 1985:240).

The first encounter with human remains at Fort Kamehameha occurred in October 1975 when children digging in the sand beneath housing quarters #8 inadvertently uncovered the remains. The remains were removed by the Army and turned over to the medical examiner, who reportedly transferred them to the Bernice P. Bishop Museum (Site record Oa-B1-70; Rosendahl 1977:1-30, 2-16). Later reports that mention an isolated burial removed from Quarters #8 in October of 1975 indicate it was discovered during site inventory investigations conducted by the Bishop Museum (Anderson and Bouthillier 1995:24; Watanabe 1991:4.1.6). As of date of this report these remains have not been confirmed to be housed at the Bishop Museum.

On 4 October 1982, a single human skeleton was encountered during a sewer line excavation at Quarters #16. These skeletal remains were removed and sent to the U.S. Central Identification Lab, Hawaii for analysis by Dr. Tadao Furue. On 13 October 1982 they were transferred to the Bernice P. Bishop Museum for curation. These remains were assigned accession number 1982.410 (Osteology Number 3176). Related documentation at the Bernice P. Bishop Museum notes that these remains were found with associated materials of a pearl button and fish bones. Later reports (Anderson and Bouthillier 1995; Watanabe 1991) identify an isolated burial removed from Quarters #16 in October of 1985. The difference in dates is believed to be a clerical error, and therefore we assume this set of remains to be those transferred to the Bishop Museum in 1982.



Four sets of human remains were inadvertently discovered under Quarters #14 in January of 1988. These remains were removed by Army Corps of Engineers staff archaeologists and sent to the U.S. Central Identification Lab, Hawaii for analysis. Dr. Madeleine J. Hinkes performed the analysis and determined the remains to be that of one female adult and three juveniles (Watanabe 1991). These remains are believed to be currently housed at the Bishop Museum. As of the date of this report, this has not been confirmed by the Bishop Museum.

In November of 1988, human bones were discovered at Battery Hasbrouck on the Fort. These remains were secondary in nature, and consisted of an adult cranium and two vertebrae. Further remains were discovered at the Battery again in May of 1989. These were also secondary and incomplete. Archaeologists from the U.S. Army Corps of Engineers, Honolulu District, investigated both of these discoveries. They concluded that sand used for construction of the Battery had been transported from the beach area near the family housing quarters, and that the original interment of these remains may have occurred on the beach (Watanabe 1991). It is presently unclear where these remains are housed. An inquiry was made of the Bishop Museum and USACE as to the whereabouts of these remains. As of date of this report, no reply has been received from either organization.

Associated funerary objects were noted only with the remains discovered in October 1982 (Bishop Museum accession number 1982.410).

The final determination of sacred objects or objects of cultural patrimony among the Fort Kamehameha collections may be established upon further consultation with Native Hawaiian organizations that have met the definition of culturally affiliated tribes and or lineal descendants and the objects specified in NAGPRA.

## **REFERENCES TO ARCHAEOLOGICAL INVESTIGATIONS**

One set of references regarding archaeological work conducted on Fort Kamehameha is attached (Appendix IV) which contains the list of references reviewed by the MCX during its archival research. No references were found for Fort Kamehameha in a search of the National Archeological Database (NADB).

## **CULTURAL OVERVIEW OF THE FORT KAMEHAMEHA REGION**

Hawaii is among some thirty-eight major archipelagos and islands referred to as Polynesia (Kirch 1984:19). Polynesian origins are believed to be based in the island realm of southeast Asia. The progress of settlement in this area of the world can be traced predominantly from west to east (Kirch 1984:41). Archaeological research indicates that as early as 50,000 years ago, a hunting/gathering population had colonized in Australia and New Guinea (Kirch 1984:53). Of



the Polynesian archipelagos, Hawaii is one of the most isolated and remote. Its closest Polynesian neighbor are the Marquesas Islands which are 3,862 km to the southwest (Kirch 1984:20). Through radiocarbon dating of occupation sites, colonization of Hawaii is believed to be AD 300-500 (Kirch 1984:77).

When English sea captain James Cook arrived in Hawaii in 1778, Hawaiian society was divided into chiefs (*ali'i* and *konohiki*) and commoners (*maka'ainana*). The chiefs carried on a practice of tracing their genealogical descent from deified ancestors, whereas commoners did not keep genealogies. "Ownership" or stewardship of land was solely in the control of chiefs. Commoners lived on the land and cultivated it. Regular payment of labor and tribute to the chief bought commoners the right to live on and cultivate the land (Kirch 1985:294).

Land use was linked to a tiered system of land division. Whole islands or parts of large islands constituted independent chiefdoms, or *moku*, which were ruled by a supreme chief or *mo'i*. The *moku* was divided into land sections known as *ahupua'a* (Kirch 1985:2; MacKenzie 1991:3; Parker 1989:10-11). The ideal *ahupua'a* existed as a self-sustaining pie-shaped wedge with its base reaching from the coast inland to its apex at the center of a mountaintop. Each *ahupua'a* had specific names and boundaries (MacKenzie 1991:3; Parker 1989:13-14). An *ahupua'a* was controlled by a lesser chief, the *ali'i*, who in turn appointed stewards, *konohiki*, to oversee production, collect tributes, and represent the chief. An *ahupua'a* was further divided into *'ili*. The people living in the *'ili* comprised the *'ohana*, extended households or groups of commoners (Kirch 1985:2; Parker 1989:10-11, 14).

Throughout the centuries preceding European contact, the various chiefs of the Hawaiian islands were continually attempting to extend their territories. A ruling chief obtained possession of land either through conquest or inheritance (Parker 1989:8). Until the reign of Kamehameha I, there were generally at least four separate kingdoms in the Hawaiian islands (Alexander 1891:26). By 1795, Kamehameha I controlled all the Hawaiian islands except Kaua'i and in 1810 its ruler, Kaumuali'i, agreed to accept Kamehameha as sovereign although Kaumuali'i retained actual control of Kaua'i until his death in 1824 (MacKenzie 1991:5; Parker 1989:89).

It was during the rule of Kamehameha III that land was divided among the king, the chiefs, and the commoners. The individual chiefs divided their lands with the king. The land granted to the king was then divided into government land and crown land, which was land privately owned by the king. What is known as the Great Mahele, or land division, began 27 January 1848 and continued to 7 March of that year. The commoners were offered fee-simple title for their house lot and the land they cultivated. Eleven thousand three hundred and nine such awards were made and are recorded in the "Mahele Book" deposited at the Land Office (Alexander 1891:256-257; MacKenzie 1991: 7; Parker 1989:109). The Board of Land Commissioners was established by law in 1845 to investigate and rule on land claims made by private individuals. In 1846, the commission adopted seven principles to guide their work dealing with degree of proof to a claim, commutation due to the government, rights of tenants, and unclaimed lands (MacKenzie 1991:6-7). This cleared way for the *maka'ainana*, who

retained interest in the lands, to acquire ownership of their *kuleanas*, or farms. A tenant could present a claim to the land commission for the land he occupied and cultivated. Upon verification of the claim's authenticity, the tenant would receive fee-simple title to his *kuleana* (MacKenzie 1991:8; Parker 1989:110).

Maps indicate that Fort Kamehameha is located in the *ahupua'a* of Halawa in the Ewa district, and in the *ahupua'a* of Moanalua in the Kona district (Hawaiian Studies Institute 1987; Sterling and Summers 1978:56a, 334a). From ancient times, the *ahupua'a* of Moanalua has been part of the royal house of Oahu. When the king of the island of Maui, Kahekili, conquered Oahu, he took claim of Moanalua. Upon his death, he ceded the land to Kamehameha I, seeing that Kamehameha was bound to conquer Oahu. Kamehameha in turn, gave Moanalua to one of his chiefs, Kameeiamoku. This land descended to Kameeiamoku's son, Hoapili, upon Kameeiamoku's death in 1802. Hoapili was married to Kaheiheimalie and adopted her son Lot Kamehameha (V), who in turn inherited the land. Ruth Keelikolani, Lot Kamehameha's half sister received the land next. From her it was willed to Bernice P. Bishop (d.1884) who left the land to S.M. Damon (Sterling and Summers 1978:328-329).

Kamehameha I gave equal portions of Halawa to his foreign advisors, John Young and Isaac Davis. When Davis died in 1810 his possession reverted to Kamehameha. John Young left his half of Halawa to his daughter Grace Kanaikui Rooke. During the Great Mahele of 1848, she petitioned for claim to the land and received LCA 8516-B. Kanaikui willed her land to her niece and adoptive daughter, Emma. The other half of Halawa was awarded to Mataio Kekuanaoa, LCA 7712. Kekuanaoa was the natural father of Alexander Liholiho (Kamehameha IV). Kekuanaoa was survived by a son Lot Kapuaiwa (Kamehameha V) who inherited that half of the land. Emma's portion of Halawa became part of her estate upon her death in 1866 (Watanabe 1991).

Pearl Harbor, located on the island of Oahu, is a strategic military stronghold. Since early in the history of the United States association with Hawaii, Pearl Harbor has played a significant role. The Reciprocity Treaty of 1875 granted the United States sole rights to the entrance of Pearl Harbor (Watanabe 1991). Fort Kamehameha is located on the east side of Pearl Harbor, and became a military installation in 1901. The installation was originally known as Queen Emma Military Reservation, after its former resident (Rosendahl 1977:30). A map of Pearl Harbor in Sterling and Summers (1978:56b) also places "Queen Emma's" residence in the area now occupied by Fort Kamehameha. The original land for Fort Kamehameha was acquired through condemnation of Queen Emma's Estate (Watanabe 1991:4.413). Emma Rooke was the wife of Kamehameha IV (Alexander Liholiho), who ruled from 1855 until his death in 1863 (Alexander 1891:280-284). Because Liholiho left no will, Queen Emma brought suit in *Estate of Kamehameha IV* (1864) for claim to share of one-half of the King's Land and the right to dower in the remaining half. The 1864 ruling by the Hawaii Supreme Court and the Act of January 3, 1865 determined that crown lands were inalienable and belonged to the office of the crown, not the individual monarch (MacKenzie 1991:10,16).

In 1893, the United States overthrew the Hawaiian monarchy and set up a provisional government. This provisional government, and later the Republic of Hawaii, designated crown land and government land as public land. When the United States annexed the Republic of Hawaii in 1898, the revolutionary government ceded these public lands to the federal government (Parker 1989:135).

When Hawaii was admitted to the Union as a state in 1959, its public lands received special status, unlike other states. The federal government relinquished to the new state the title to former crown and government lands that had been ceded to the United States at the time of annexation. Certain lands set aside through an act of congress, executive order, presidential proclamation, or gubernatorial proclamation, remained the property of the United States with the proviso that they be returned to the state when they are declared unnecessary to federal needs (MacKenzie 1991:18).

## SECTION 6 COMPLIANCE

P.L. 101-601 (NAGPRA) requires that federal agencies engage in active consultation with Native Hawaiian organizations regarding archaeological collections from the installation. Enclosed are draft NAGPRA Section 6 Summary letters (Appendix I) and a list of points of contact at three Native Hawaiian organizations (Appendix II).

Two state-wide organizations are identified in NAGPRA (Sections 2.6 and 2.12) and must be contacted: the Office of Hawaiian Affairs, which was established by the constitution of the state of Hawaii; and Hui Malama I Na Kupuna O Hawai'i Nei, the non-profit, Native Hawaiian organization incorporated by the state to provide guidance and expertise in decisions dealing with Native Hawaiian cultural issues, particularly burial issues. Additionally, the Departmental Consulting Archeologist of the National Park Service recommends contacting the relevant island burial council (National Park Service 1993).

Although only the above mentioned organizations are identified in Appendix II, there may be other Native Hawaiian organizations or individuals that particular installations should contact regarding NAGPRA issues. The statutory definition (Section 2.11) should be used to identify any other Native Hawaiian organizations:

“Native Hawaiian organization” means any organization which:

- (A) serves and represents the interests of Native Hawaiians;
- (B) has as a primary and stated purpose the provision of services to Native Hawaiians,  
and
- (C) has expertise in Native Hawaiian Affairs.

Additionally, the term “Native Hawaiian” is defined as “any individual who is a descendant of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the State of Hawaii” (Section 2.10).

Refer to 43 CRF Part 10 for the implementing regulations for NAGPRA.

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## REFERENCES CITED

Alexander, W.D.

- 1891 *A Brief History of the Hawaiian People*. American Book Company, New York, Cincinnati & Chicago.

Anderson, Lisa and Katharine S. Bouthillier

- 1995 *DRAFT: Assessment and Analysis of Historic Properties at the U.S. Air Force Fort Kamehameha (USAFFK), Honolulu, Hawaii for Preparation of a Cultural Resource Management Plan*. Prepared by Ogden Environmental and Energy Services, Honolulu, HI for the U.S. Army Corps of Engineers, Pacific Ocean Division, Fort Shafter.

Hawaiian Studies Institute

- 1987 *Oahu: Pre-Mahele Moku and Ahupua'a*. Map prepared by Hawaiian Studies Institute, Honolulu, HI.

Kirch, Patrick Vinton

- 1984 *The Evolution of the Polynesian Chiefdoms*. Cambridge University Press, Cambridge, New York, Port Chester, Melbourne, Sydney.
- 1985 *Feathered Gods and Fishhooks: An Introduction to Hawaiian Archaeology and Prehistory*. University of Hawaii Press, Honolulu.

MacKenzie, Melody K.

- 1991 Native Hawaiian Lands and Sovereignty: Historical Background. In *Native Hawaiian Rights Handbook*, edited by Melody Kapilialoha MacKenzie, pp. 3-25. Native Hawaiian Legal Corporation and Office of Hawaiian Affairs, Honolulu, Hawaii.

Parker, Linda S.

- 1989 *Native American Estate: The Struggle Over Indian and Hawaiian Lands*. University of Hawaii Press, Honolulu.

Rosendahl, Paul

1977 *Archaeological Inventory and Evaluation Report for Installation Environmental Impact Statement For U.S. Army Support Command, Hawaii (USASCH) Part I: Report Text*. Prepared by Department of Anthropology, Bernice P. Bishop Museum for the Department of the Army, U.S. Army Engineer Division, Pacific Ocean.

Sterling, Elsbeth P. and Catherine C. Summers

1978 *Sites of Oahu*. Department of Anthropology/Department of Education, Bernice P. Bishop Museum. Honolulu, HI.

Watanabe, Farley

1991 *Archaeological Site Survey and Subsurface Testing for MIDPAC T-1 Network Project, Fort Kamehameha, Oahu Island*. Prepared by U.S. Army Corps of Engineers, Pacific Ocean Division for Defense Communications Agency, Pacific Area, Wheeler Air Force Base, HI

## APPENDIX I

### DRAFT SECTION 6 SUMMARY LETTERS

[Installation Header]

Mr. Kunani Nihipali, President  
Hui Malama I Na Kupuna O Hawai'i Nei  
P.O. Box 190  
Haleiwa, HI 96712-0190

Dear Mr. Nihipali:

I am writing to inform you of collections held by Fort Kamehameha that may contain Native Hawaiian cultural items, as defined by the Native American Graves Protection and Repatriation Act (NAGPRA). Fort Kamehameha has documented these archaeological collections in a Summary in accordance with the requirements of Section 6 of NAGPRA.

Fort Kamehameha is responsible for one cubic foot of artifacts reportedly housed at Cultural Surveys Hawaii, Kailua. These archaeological collections were generated from archaeological surveys, testing, and mitigation for a water main replacement in 1986. The collections consist of prehistoric beads, stone flakes, and fishhook fragments as well as historic materials including glass, ceramic, metal, shell and animal bone.

In accordance with Section 6 of NAGPRA, and as defined in Section 2.11, we are inviting you to consult with us regarding these archaeological collections. We are also notifying the Office of Hawaiian Affairs and the Oahu Burial Committee. Upon your written request, we will provide you access to review our records, catalogues, relevant studies, or other pertinent data for the purpose of determining the geographic origin, cultural affiliation, and basic facts surrounding acquisition and accession of these collections.

Fort Kamehameha became an Air Force installation 1 October 1992. The Army is responsible for NAGPRA compliance for the installation during its tenure as Army property, with the exception of a water treatment plant project conducted by the Navy beginning in 1992. The Navy has assumed responsibility for NAGPRA compliance during this project.

Human remains and associated objects were identified as being discovered on Fort Kamehameha when it was property of the Army. Therefore, by means of this letter we are also initiating consultation regarding the NAGPRA Section 5 Inventory. The U.S. Army would like to schedule Section 5 Inventory investigations of human remains and associated funerary objects



at a date yet to be determined, tentatively in 1997. If Hui Malama I Na Kupuna O Hawai'i Nei wishes to comment on, or participate in, the Section 5 Inventory, please respond within 60 days of receipt of this letter.

Please feel free to contact [Installation POC name] regarding any of these issues, at [telephone, address].

To facilitate discussions between Fort Kamehameha and Hui Malama I Na Kupuna O Hawai'i Nei on these matters, please forward the name and method of contacting your organizational representative or preferred NAGPRA point of contact. We look forward to working with you.

Sincerely,

[Commander's signature]

|     |         |   |
|-----|---------|---|
| CF: | USARPAC | Commander U.S. Army Garrison, HI<br>ATTN: APVG-GWV (Mark Salley)<br>Schofield Barracks, HI 96857-5000                   |
|     | USAEC   | Commander, U.S. Army Environmental Center<br>ATTN: SFIM-AEC-EC (Guldenzopf)<br>Aberdeen Proving Ground, MD 21010-5401   |
|     | MCX     | Commander, U.S. Army Corps of Engineers<br>ATTN: CELMS-PD-C (Trimble)<br>1222 Spruce Street<br>St. Louis, MO 63103-2833 |

[Installation Header]

Ms. Linda Kawai'ono Delaney  
Land & Natural Resources Officer  
Office of Hawaiian Affairs  
711 Kapiolani Blvd, Suite 500  
Honolulu, HI 96613

Dear Ms. Delaney:

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Please feel free to contact [Installation POC name] regarding any of these issues, at [telephone, address].

To facilitate discussions between Fort Kamehameha and the Office of Hawaiian Affairs on these matters, please forward the name and method of contacting your organizational representative or preferred NAGPRA point of contact. We look forward to working with you.

Sincerely,

[Commander's signature]

|     |         |   |
|-----|---------|---|
| CF: | USARPAC | Commander U.S. Army Garrison, HI<br>ATTN: APVG-GWV (Mark Salley)<br>Schofield Barracks, HI 96857-5000                   |
|     | USAEC   | Commander, U.S. Army Environmental Center<br>ATTN: SFIM-AEC-EC (Guldenzopf)<br>Aberdeen Proving Ground, MD 21010-5401   |
|     | MCX     | Commander, U.S. Army Corps of Engineers<br>ATTN: CELMS-PD-C (Trimble)<br>1222 Spruce Street<br>St. Louis, MO 63103-2833 |

[Installation Header]

Ms. Phyllis Coochie Cayan, Chairperson  
Oahu Burial Committee  
98-295 Ualo #X4  
Aiea, HI 96701

Dear Ms. Cayan:

I am writing to inform you of collections held by Fort Kamehameha that may contain Native Hawaiian cultural items, as defined by the Native American Graves Protection and Repatriation Act (NAGPRA). Fort Kamehameha has documented these archaeological collections in a Summary in accordance with the requirements of Section 6 of NAGPRA.

Fort Kamehameha is responsible for one cubic foot of artifacts reportedly housed at Cultural Surveys Hawaii, Kailua. These archaeological collections were generated from archaeological surveys, testing, and mitigation for a water main replacement in 1986. The collections consist of prehistoric beads, flakes, and fishhook fragments as well as historic materials including glass, ceramic, metal, shell and animal bone.

In accordance with Section 6 of NAGPRA, as well as with recommendation from the National Park Service's Departmental Consulting Archaeologist, we are inviting you to consult with us regarding these archaeological collections. We are also notifying Hui Malama I Na Kupuna O Hawai'i Nei and the Office of Hawaiian Affairs. Upon your written request, we will provide you access to review our records, catalogues, relevant studies, or other pertinent data for the purpose of determining the geographic origin, cultural affiliation, and basic facts surrounding acquisition and accession of these collections.

Fort Kamehameha became an Air Force installation 1 October 1992. The Army is responsible for NAGPRA compliance for the installation during its tenure as Army property, with the exception on a water treatment plant project conducted by the Navy beginning in 1992. The Navy has assumed responsibility for NAGPRA compliance during this project.

Human remains and associated objects were identified as being discovered on Fort Kamehameha when it was property of the Army. Therefore, by means of this letter we are also initiating consultation regarding the NAGPRA Section 5 Inventory. The U.S. Army would like to schedule Section 5 Inventory investigations of human remains and associated funerary objects at a date yet to be determined, tentatively in 1997. If the Oahu Burial Committee wishes to comment on, or participate in, the Section 5 Inventory, please respond within 60 days of receipt of this letter.

Please feel free to contact [Installation POC name] regarding any of these issues, at [telephone, address].

To facilitate discussions between Fort Kamehameha and the Oahu Burial Committee on these matters, please forward the name and method of contacting your organizational representative or preferred NAGPRA point of contact. We look forward to working with you.

Sincerely,

[Commander's signature]

|     |         |   |
|-----|---------|---|
| CF: | USARPAC | Commander U.S. Army Garrison, HI<br>ATTN: APVG-GWV (Mark Salley)<br>Schofield Barracks, HI 96857-5000                   |
|     | USAEC   | Commander, U.S. Army Environmental Center<br>ATTN: SFIM-AEC-EC (Guldenzopf)<br>Aberdeen Proving Ground, MD 21010-5401   |
|     | MCX     | Commander, U.S. Army Corps of Engineers<br>ATTN: CELMS-PD-C (Trimble)<br>1222 Spruce Street<br>St. Louis, MO 63103-2833 |

## **APPENDIX II**

### **NATIVE HAWAIIAN POINTS OF CONTACT**

#### **Organizations Named in the Statute**

Mr. Kunani Nihipali, President  
Hui Malama I Na Kupuna O Hawai'i Nei  
P.O. Box 190  
Haleiwa, HI 96712-0190  
808-565-6575

Ms. Linda Kawai'ono Delaney  
Land & Natural Resources Officer  
Office of Hawaiian Affairs  
711 Kapiolani Blvd, Suite 500  
Honolulu, HI 96613  
808-586-3742  
808-586-3799 FAX

#### **Island Burial Council**

Ms. Phyllis Coochie Cayan, Chairperson  
Oahu Burial Council  
98-295 Ualo #X4  
Aiea, HI 96701  
(808) 586-3167  
(808) 586-3109 FAX

## APPENDIX III

### SUMMARY OF CURRENT LOCATIONS OF ARCHAEOLOGICAL COLLECTIONS FROM FORT KAMEHAMEHA

All collections information has been entered into a Paradox data base file and can be queried by any of the fields listed below, as well as by the name of the installation and by MACOM. The data base will be delivered by the MCX to the U.S. Army Environmental Center upon completion of the U.S. Army NAGPRA Compliance Project. Inquiries for additional information are welcome (MCX: 314-331-8865; U.S. Army Environmental Center NAGPRA Compliance Project: 410-671-1573). The data fields listed in the summary of collections contain the following information:

|                      |   |
|----------------------|---|
| REPOSITORY:          | The current location in which the collection is stored, as of the date of this report.  |
| REPOSITORY POC:      | The person contacted by the MCX, or the person to whom inquiries regarding the collection should be addressed.  |
| TELEPHONE:           | The telephone number for the repository POC.  |
| COLLECTION ID:       | The identifying unit used by the repository to store and/or locate the collection. This can be a unique accession number assigned by the repository, the archaeological site number or project name, the name of the collector of the collection, or another number or name assigned by the repository. |
| SITE NUMBERS:        | The official site number or name only for those sites from which materials were collected. An investigator may have performed work at additional sites but did not collect any materials. Those site numbers are not included in this field.  |
| FIELDWORK DATES:     | The date(s) during which the investigation(s) occurred. This information is provided to differentiate between projects that may have investigated the same site repeatedly.   |
| EXCAVATOR/COLLECTOR: | The individual and/or organization that conducted the investigation.  |



**COLLECTION SIZE:** The volume or number of objects in a collection, estimated by the repository POC or from project reports.

**DESCRIPTION OF MATERIALS:** General material classes of the objects in the collection derived from data provided on site records, in references, and/or by the Repository POC.

**ANTIQUITY/ARCH. PERIOD:** Chronological or cultural-historical designations recorded on site records or in references specific to the collection.

**CULTURAL AFFILIATION:** This column contains only those ethnic identifications found in the site records or references specific to the collection. This field is left blank if no such information was recorded.

**BASIS OF DETERMINATION:** Documents the source of the cultural affiliation information (e.g., site record, oral testimony, reference).

**SECTION 5 MATERIALS:** Describes the number and kind of human skeletal remains and associated funerary objects in the collection, as indicated by the site records, references, repository management documents, or information from repository POC. If these materials are present or are suspected to be present, NAGPRA Section 5 requires a physical inventory of the materials.

## Summary of Current Location of Archaeological Collec

As of March 1996

| Repository                             | Repository POC | Telephone      | Collection ID              | Site Numbers | Fieldwork Dates | Excav           |
|--|----------------|----------------|----------------------------|--------------|-----------------|-----------------|
| Bernice P. Bishop Museum, Honolulu, HI | Toni Han       | (808) 484-4117 | 1982.410 (Osteology #3176) |              | 10/04/82        |                 |
| Cultural Survey of Hawaii, Kailua, HI  | John Winieski  | (808) 262-9972 |                            |              | 1986            | Cultural Hawaii |

Location of Archaeological Collections From: Fort Kamehameha, Hawaii [PACCOM]

As of March 1996

|  | Fieldwork Dates | Excavator/Collector        | Collection Size           | Description of Materials  | Antiquity/Archaeological Period | Cultural Affiliation | Basis of Determination |
|--|-----------------|----------------------------|---------------------------|---|---------------------------------|----------------------|------------------------|
|  | 10/04/82        |                            |                           | One Human Skeletal Remain   | Prehistoric                     |                      |                        |
|  | 1986            | Cultural Surveys of Hawaii | 1 cu. ft. (193 Artifacts) | Prehistoric Basalt Beads, Limestone Flakes, Fishhook Fragment; Historic Glass, Metal, Ceramic, Shell Buttons, Animal Bone & Shell Midden, Charcoal & Soil Samples | Prehistoric; Historic           |                      |                        |

|                       | Antiquity/Archaeological Period | Cultural Affiliation | Basis of Determination | Section 5 Materials |
|-----------------------|---------------------------------|----------------------|------------------------|---------------------|
|                       | Prehistoric                     |                      |                        | Yes                 |
| e<br>c<br>is,<br>coal | Prehistoric; Historic           |                      |                        | No                  |

## APPENDIX IV

### MCX LIST OF REFERENCES

In addition to the references reviewed by MCX personnel at the archaeological site information center, every attempt was made to obtain references cited but not on file. Information taken from these references was coded for data relating to collections made from sites located on installation property (see attached sample of PD-C Bibliographic Data Sheet form) and entered into a data base for ease of manipulation.

Report titles were drawn directly from the title page of reports, and consist of the following fields:

| FIELD             | DATA ENTERED   |
|-------------------|--|
| Subject Property  | Army Installation name   |
| Last Name         | Primary author's last name   |
| First Name        | Primary author's first name  |
| Middle Initial    | Primary author's middle initial  |
| Secondary Authors | Names of secondary authors, <i>or</i> in instances where the author is a company rather than an individual, the company name is listed here. |
| Title             | Title of the reference. For letter reports, the person or agency to whom the correspondence is addressed is listed as the title.             |
| Series            | If the report is part of a publication series, the name and number are provided here.  |
| Date              | Date of publication or submission  |
| Length            | Report length in pages   |
| Contract Number   | Contract number and delivery order number, if applicable   |

The data for the next three fields are drawn directly from the report title page and reflect the hierarchy of contracting agencies involved in accomplishing the work. In some cases, the sponsoring agency is listed as the Army installation; in others, the intermediary contracting agent, (e.g., the Army Corps of Engineers or the National Park Service) is listed as the Sponsoring Agency.

|                   |   |
|-------------------|---|
| Sponsoring Agency | Agency for which the report was prepared    |
| Contractor        | The agent contracted to perform the work    |
| Subcontractor     | The agent subcontracted to perform the work |

The majority of the citations for archaeological investigations on Army land refer to unpublished reports prepared under contract with federal agencies, consequently the MCX printout was designed to address these reports. In instances where the author is a company rather than an individual, the company name is listed in the Secondary Authors field (due to the length of the field). For published references, the publisher is listed in the Sponsoring Agency field.

Page \_\_\_\_ of \_\_\_\_

Fieldwork  
Page \_\_\_\_ of \_\_\_\_

NADB No. \_\_\_\_\_

PD-C Collection No. \_\_\_\_\_

## PD-C Bibliography Data Sheet

Date: \_\_\_\_\_

Information obtained by: \_\_\_\_\_

**PD-C Project:**

Subject Property:

*Repository (name and location):*

*Record Collection Name/Number:*

*Report Date and Length (in pages):*

*Author(s):*

*Title:*

*Contractor/Address or Publisher/Address (city, state):*

*Subcontractor/Address (city, state):*

*Report Series and Number:*

*Contract/Purchase Order Number(s):*

*Sponsoring Agency/Address:*

*Project Name and Location:*

Principal Investigator(s)/Director(s):

Fieldwork Dates:

Type of Investigation (e.g., survey, testing, mitigation):



**PD-C Bibliography Data Sheet (continued)**

**Site Numbers:**

**Archaeological Period (e.g., Hohokam, Mississippian):**

**Material Classes (range):**

**Artifact Collections and Locations:**

**Approximate Size of Collections (e.g., number of objects):**

**Record Collections and Locations:**

**NAGPRA Materials (Check if present)**

**Human Skeletal Remains** \_\_\_\_\_

Human Skeletal Remains Data Sheet ☐  
Number of Attached Sheets \_\_\_\_\_

**Objects**

**Associated Funerary** \_\_\_\_\_

**Unassociated Funerary** \_\_\_\_\_

Object Data Sheet ☐  
Number of Attached Sheets \_\_\_\_\_

**Sacred** \_\_\_\_\_

**Cultural Patrimony** \_\_\_\_\_

**Cultural Affiliation(s):**

**Basis for Affiliation Determination (e.g., geographic location, burial practices):**

**Comments:**

MCX List of References for Fort Kamehameha, Hawaii [PACCOM] as of March 1996

Subject property : Fort Kamehameha, HI

Last name : Anderson

First name : Lisa

Middle Initial : K.

Secondary Authors : Katharine S. Bouthillier

Title : Assessments and Analysis of Historic Properties at the U.S. Air Force For Kamehameha (USAFFK), Honolulu, Hawaii for Preparation of a Cultural Resource Management Plan. (Draft).

Series :

Date : 05/95

Length : 194

Contract Number : DACA83-91-0025, Delivery Order 0015

Sponsoring Agency : US Army Corps of Engineers-Pacific Ocean Division, Fort Shafter, HI

Contractor : Odgen Environmental and Energy Services

Subcontractor :

Subject property : Fort Kamehameha, HI

Last name : Drolet

First name : Robert

Middle Initial :

Secondary Authors : Allen Schilz

Title : Emergency Data Recovery Project for Fort Kamehameha Wastewater Treatment Plant, Pearl Harbor, O'ahu, Hawaii.

Series :

Date : 03/11/92

Length :

Contract Number : N62742-91-D-0507

Sponsoring Agency :

Contractor : Odgen Environmental and Energy Services

Subcontractor :

Subject property : Fort Kamehameha, HI

Last name : Erkelene

First name : Conrad

Middle Initial :

Secondary Authors : J. Stephen Athens

Title : Archaeological Review and Recommendations for the Fort Kamehameha Sewage Treatment Plant Expansion and Housing Relocation Plans.

Series :

Date : 03/92

Length :

Contract Number :

Sponsoring Agency :

Contractor : Belt, Collins, and Associates

Subcontractor : International Archaeological Research Institute, Inc.

MCX List of References for Fort Kamehameha, Hawaii [PACCOM] as of March 1996

Subject property : Fort Kamehameha, HI

Last name : Hammatt

First name : Hallett

Middle Initial : H.

Secondary Authors : Douglas Borthwick and David Shideler

Title : Archaeological Monitoring of Water Main Replacement, Ft. Kamehemha, Halawa, O'ahu, Hawai'i.

Series :

Date : 04/88

Length : 103

Contract Number : DACA83-87-M-0043

Sponsoring Agency : US Army Corps of Engineers-Pacific Ocean Division, Fort Shafter, HI

Contractor : Cultural Surveys Hawaii

Subcontractor :

Subject property : Fort Kamehameha, HI

Last name : Hammatt

First name : Hallett

Middle Initial : H.

Secondary Authors : Douglas Borthwick and David Shideler

Title : Archaeological Testing for a Proposed Water Main Replacement, Ft. Kamehameha, Oahu, Hawaii.

Series :

Date : 06/86

Length : 96

Contract Number :

Sponsoring Agency : US Army Corps of Engineers-Pacific Ocean Division, Fort Shafter, HI

Contractor : Cultural Surveys Hawaii

Subcontractor :

Subject property : Fort Kamehameha, HI

Last name : Kaku

First name : Melvin

Middle Initial : N.

Secondary Authors :

Title : Letter to Mr. Paty (DLNR) Regarding Phase II Scope of Work for Data Recovery, Phase II Burial Treatment Plan, and M. O.A. for Fort Kamehameha Sewage Treatment Plan Expansion Project.

Series :

Date : 1992

Length :

Contract Number :

Sponsoring Agency : US Navy Pacific Division

Contractor :

Subcontractor :

MCX List of References for Fort Kamehameha, Hawaii [PACCOM] as of March 1996

Subject property : Fort Kamehameha, HI

Last name : McAllister

First name : J.

Middle Initial : Gilbert

Secondary Authors :

Title : Archaeology of Oahu.

Series : (1933) Bernice P. Bishop Museum Bulletin 104; (1985) Kraus Report

Date : 1933, (1985)

Length : 213

Contract Number :

Sponsoring Agency : Bernice P. Bishop Museum, Honolulu, HI

Contractor :

Subcontractor :

Subject property : Fort Kamehameha, HI

Last name : Rosendahl

First name : Paul

Middle Initial :

Secondary Authors :

Title : Archaeological Inventory and Evaluation Report for U.S. Army Support Command, Hawaii (USASCH) Part I: Report Text.

Series :

Date : 03/77

Length : 106

Contract Number : DACA84-76-C-0175

Sponsoring Agency : US Army Corps of Engineers-Pacific Ocean Division, Fort Shafter, HI

Contractor : Department of Anthropology, Bernice P. Bishop Museum

Subcontractor :

Subject property : Fort Kamehameha, HI

Last name : Rosendahl

First name : Paul

Middle Initial :

Secondary Authors :

Title : Archaeological Inventory and Evaluation Report for U.S. Army Support Command, Hawaii (USASCH) Part II: Tables.

Series :

Date : 03/77

Length : 57

Contract Number : DACA84-76-C-0175

Sponsoring Agency : US Army Corps of Engineers-Pacific Ocean Division, Fort Shafter, HI

Contractor : Department of Anthropology, Bernice P. Bishop Museum

Subcontractor :

MCX List of References for Fort Kamehameha, Hawaii [PACCOM] as of March 1996

Subject property : For: Kamehameha, HI

Last name : Watanabe

First name : Farley

Middle Initial : K.

Secondary Authors :

Title : Archaeological Site Survey and Subsurface Testing for Midpac T-1 Network Project Fort Kamehameha, Oahu Island.  
(Draft)

Series :

Date : 04/24/91

Length :

Contract Number :

Sponsoring Agency : Defense Communicatiaons Agency, Pacific Area, Wheeler Air Force Base, HI

Contractor : US Army Corps of Engineers-Pacific Ocean District

Subcontractor :

## APPENDIX V

### HUMAN REMAINS RECOVERED FROM FORT KAMEHAMEHA DURING ARMY TENURE

| Date          | Number of<br>Individuals<br>(Site Number)     | Contractor/<br>Excavator   | Report/<br>Documentation   | Original Location of<br>the Remains                   | Status/<br>Repository              |
|---------------|---|--|--|---|------------------------------------|
| 1975          | 1<br>(50-80-13-9501)<br>(Oa-B1-70)            | children playing in<br>sand/Army staff/<br>possibly Bishop<br>Museum staff | Bishop Museum site<br>record for Oa-B1-70;<br>Rosendahl 1977:1-30,<br>2-16; Watanabe 1991:<br>4.1.6; Anderson<br>1995:24 | Quarters #8   | unknown                            |
| 4 Oct<br>1982 | 1   |  | Bishop Museum<br>Accession 1982.410<br>(Osteology #3176);<br>Watanabe 1991: 4.1.6;<br>Anderson 1995:24                   | result of sewer line<br>excavation at Quarters<br>#16 | curated at the<br>Bishop<br>Museum |
| Jan.<br>1988  | 1 young adult female, 3<br>juveniles          | USACE staff and<br>CILHI staff   | Watanabe 1991: 4.1.8;<br>Anderson 1995:24  | Quarters #14  | unknown                            |
| Nov.<br>1988  | adult human skull and<br>two vertebrae        | USACE staff  | Watanabe 1991: 4.1.8;<br>Anderson 1995:24  | Battery Hasbrouck                                     | unknown                            |
| May<br>1989   | "several individuals"-<br>secondary in nature | USACE staff  | Watanabe 1991: 4.1.8;<br>Anderson 1995:24  | Battery Hasbrouck                                     | unknown                            |